



Rural U.S. Examples of Wireless Broadband Deployments



Patrick Leary

Alvarion, Inc.

May 3, 2004

Midwest Wireless

- Top 20 US cellular carrier
- Over 350,000 cellular customers
- Providing wireless broadband to over 150 townships
- More than 3,000 wireless broadband subscribers
- Over 100 broadband cell sites
- Deploying BreezeACCESS Complete Spectrum™ (900MHz, 2.4GHz, 5GHz)
- Cellular churn drops to near zero when broadband is bundled



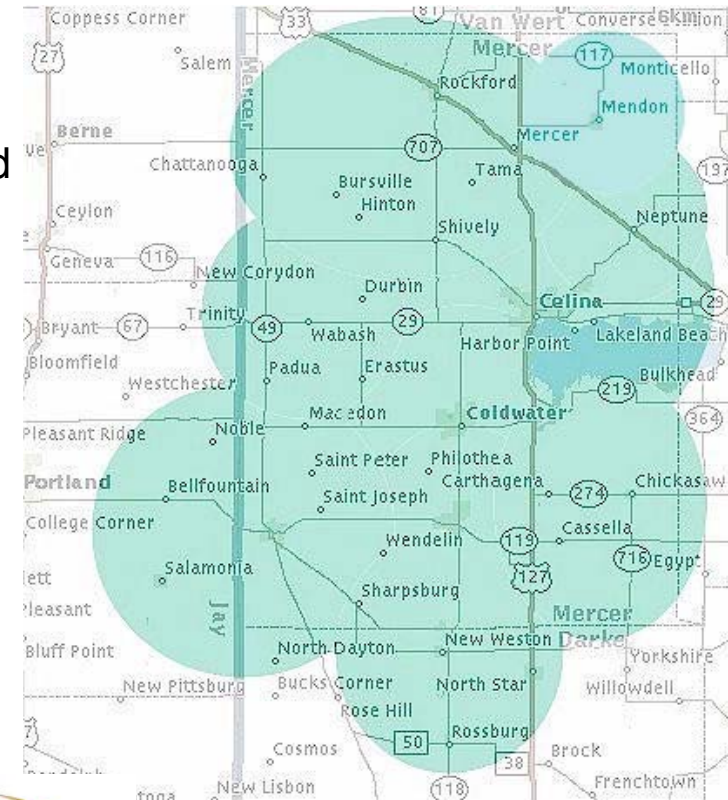
San Diego County Sheriff's Dept.

- Chief law enforcement agency in the County of San Diego with Approximately 4,000 employees
- General law enforcement and jail functions in a service area of 4,200 square miles
- 600 patrol vehicles equipped with Alvarion BreezeNET SA10 station adaptors
- 40-50 base stations incorporating 70 Access Points installed at various facilities including station houses, courts, and jails
- Seamless roaming integration with CDPD network
- Gaining 2 man hours per days additional productivity



Wabash Communications

- Based in OH, Wabash was founded in 1905
- In 1993, formed consortium with 19 other ILECs to create “Brightnet” brand for advanced services
- Wireless broadband networks covers over 10,000 square miles
- All users also get 25Mbps web space, 24/7 support, mail, spam filter and anti-virus
- Over 800 wireless subscribers
- Deploying BreezeACCESS Complete Spectrum™
(900MHz, 2.4GHz, 5GHz)



Telco

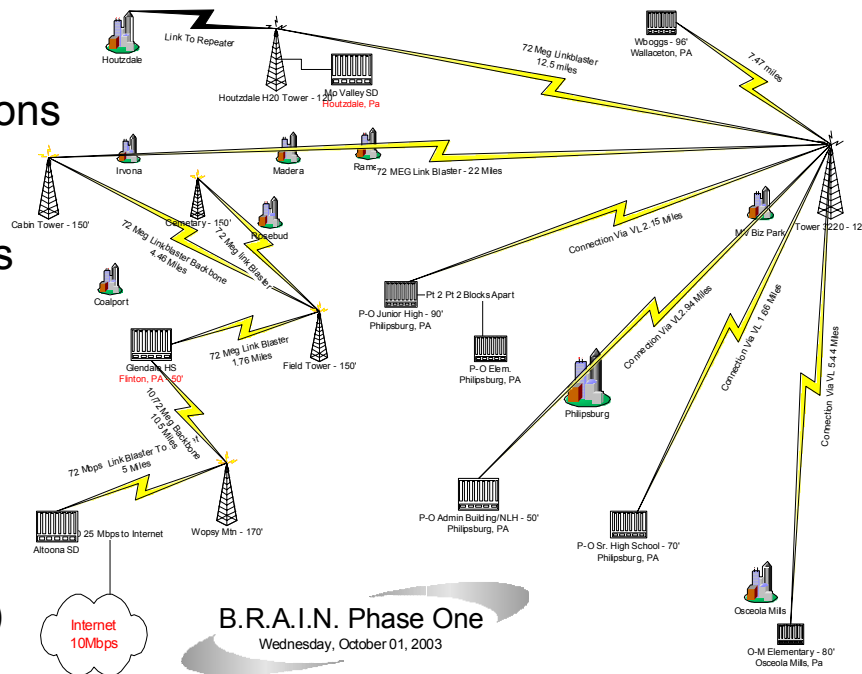
Diode

- Owned by Diller Telephone and operating in very rural Nebraska
- Provides free Internet access to city offices in exchange for tower rights
- Partners with local universities to educate population on the value of broadband
- Wireless broadband networks covers over 10,000 square miles
- Services over 1,600 wireless broadband subscribers
- Deploying BreezeACCESS Complete Spectrum™ (900MHz, 2.4GHz, 5GHz)



Sting Communications

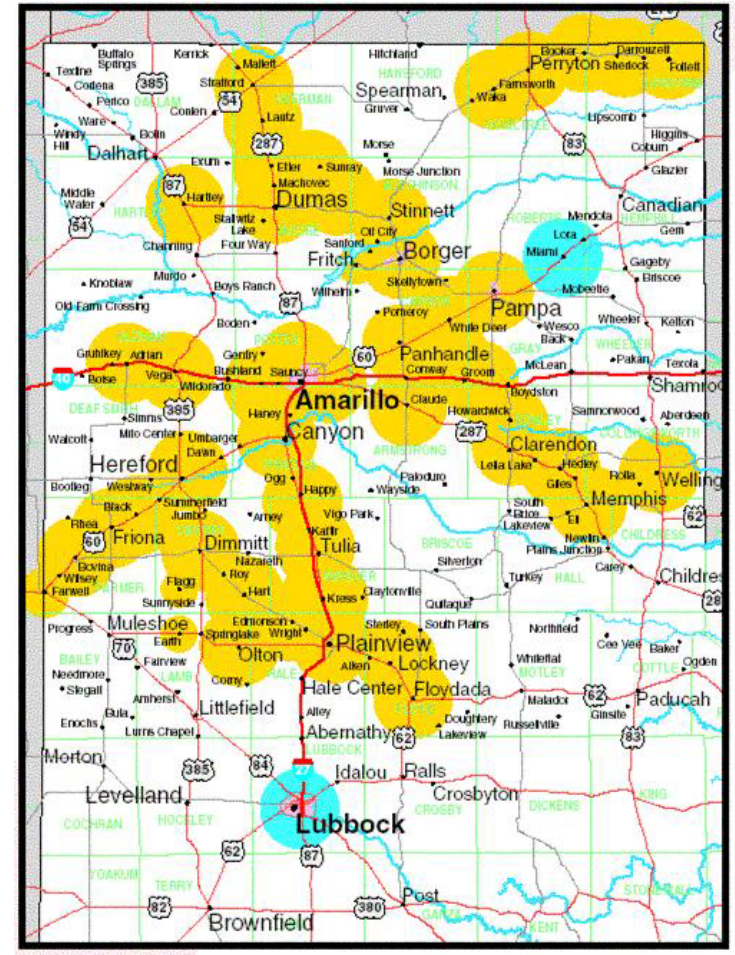
- Provide wireless services to about 100 towns in Pennsylvania
- Provides sub-T1 to 480Mbps connections
- Top 5 USA WISP
- Over Alvarion-based 1,000 subscribers
- Experts at leveraging grants, e-Rate funding
- Expanding into neighboring states
- Deploying BreezeACCESS Complete Spectrum™ (900MHz, 2.4GHz, 5GHz)



Telco

AMA Techtel

- Privately held CLEC in Amarillo, TX
- Offers Internet and VPN services
- Achieved rapid return on investment
- Covering 20,000 square miles
- Almost 6,000 CPE installed
- Deploying BreezeACCESS Complete Spectrum™ (900MHz, 2.4GHz, 5GHz)

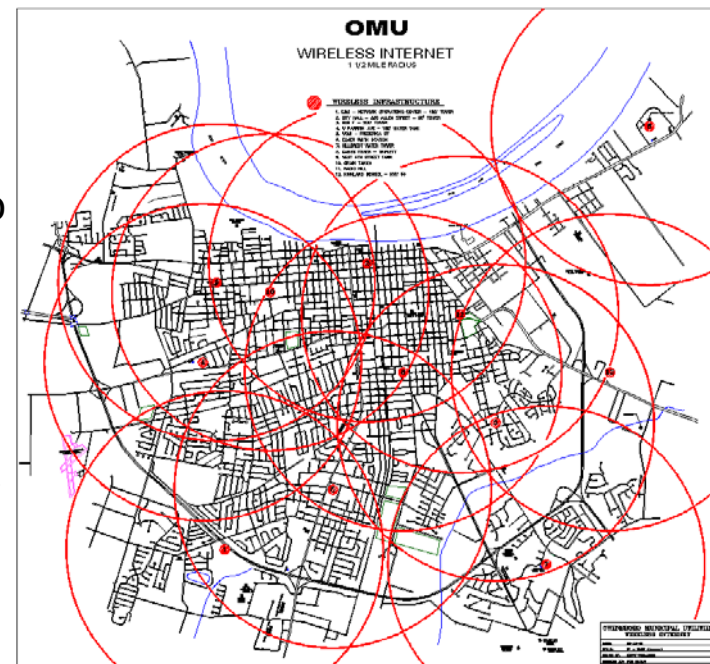


 **AMA TechTEL**

www.amatechtel.com

Owensboro Municipal Utilities

- Largest municipally-owned utility in Kentucky
- Extensive fiber optic deployments
- Over 1,900 wireless broadband subscribers
- Now leveraging regional utility relationships to expand beyond their service area
- Largest wireless broadband deployment by a municipal utility in the USA
- Competes locally with xDSL, cable, and other wireless
- Deploying BreezeACCESS Complete Spectrum™ (900MHz, 2.4GHz, 5GHz)
- Partnering with Kenergy electric cooperative for 14 county expansion



Wheatland Electric

- Electric membership cooperative in western Kansas
- Serves 16,000 customers with electric power
- Almost 2,000 wireless broadband subscribers in first 30 months
- Take rates as high as 35% per town
- Rolling out to cover entire 11 county footprint
- Largest wireless broadband deployment by a cooperative utility in the USA
- Competes locally with xDSL and cable
- Deploying BreezeACCESS Complete Spectrum™
(900MHz, 2.4GHz, 5GHz)

Wheatland
Broadband



- Replaced all leased lines for schools, libraries, etc.
- Over 5 towers and 35 schools or offices in first phase
- Min. 10Mbps per connection and AES-level security
- 10X more capacity for a fraction of the former cost
- Now expanding to connect more public agencies and schools in nearby communities
- Deploying BreezeACCESS VL 5GHz non-line-of-sight OFDM solution



Municipal

Scottsburg, IN

- Pop. About 6,000. Major businesses threatening to leave if affordable broadband access was not available (T1's cost \$1,300/month)
- Project led by visionary Mayor Bill Graham
- Invested \$385K vs. proposed \$6M in fiber
- Achieved total city coverage from start to finish in 4 months
- Currently about 400 subscribers
- Schools now saving \$6k/month
- BreezeACCESS Complete Spectrum (900MHz, 2.4GHz, 5GHz)



Municipal

Allegany County, MD

- 100% of all public buildings and non-profits connected via wireless now
- Becoming the local carrier
- 85% of all residential will be covered
- 95% of all commercial
- Redundant and carrier-class
- Largest municipal wireless deployment in the U.S.
- Deploying BreezeACCESS Complete Spectrum (900MHz, 2.4GHz, 5GHz)



Thank You



patrick.leary@alvarion.com